



AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (original) An isolated mutant Alcohol Dehydrogenase 7 (ADH7) nucleotide comprising one or more of SEQ ID NOS: 2-7.

2. (currently amended) The nucleotide according to claim 1, ~~further comprising appearing wherein said nucleotide appears in a~~ human wild-type Alcohol Dehydrogenase 7 (ADH7) gene.

3. (original) The nucleotide according to claim 1, comprising SEQ ID NO: 2.

4. (original) The nucleotide according to claim 1, wherein said nucleotide is capable of triggering Parkinson's disease in a human and/or passing the disease to a later human generation.

5. (original) An isolated nucleic acid probe consisting of one of SEQ ID NOS: 1-7.

6. (original) A nucleotide which is capable of specifically hybridizing under stringent conditions to a nucleotide according to claim 1.

7. (original) A vector comprising a nucleotide according to claim 1.

8. (original) A recombinant cell comprising a vector according to claim 7.

9. (original) A kit comprising a nucleotide according to claim 1.

10. (original) A kit comprising means for detecting at least one of SEQ ID NOS: 1-7.

11. (new) A nucleotide which is capable of specifically hybridizing under stringent conditions to an isolated mutant Alcohol Dehydrogenase 7 (ADH7) nucleotide comprising one or more of SEQ ID NOS: 2-7, and wherein said hybridization conditions are stringent conditions in which the salt concentration is less than about 1.0 M Na ion, at a pH of about 7.0-8.3 and the temperature is between 30°C and 60°C.

12. (new) An isolated human ADH7 sequence comprising one or more SEQ ID NOS: 2-7.

13. (new) An isolated mutant Alcohol Dehydrogenase 7 (ADH7) nucleotide comprising one or more SEQ ID NOS: 1-7 and wherein said nucleotide is capable of triggering Parkinson's disease in a human and/or passing the disease to a later human generation.

14. (new) A method for screening Parkinson's disease in a patient, comprising screening for a nucleotide sequence according to claim 12.